

## LOCAL REVIEW OF THE PRELIMINARY COUNTY LAND USE PLAN

The Waukesha County Development Plan Advisory Committee completed review of the preliminary County land use plan in October 1995. Following that review, the Committee directed the staff to hold a series of intergovernmental meetings at which the preliminary County land use plan could be presented to the local units of government concerned. Seven such meetings were held in November and December 1995. The primary purpose of the meetings was to help local appointed and elected officials and the general public to understand better and to react to the proposed plan. The date, location, participating communities, and number of persons attending each of the meetings are set forth in Table 124. Prior to the meetings, the communities invited to attend were each provided with a one inch equals 2,000 feet scale map depicting the preliminary County land use plan as it pertained to the particular jurisdictions concerned.

A "briefing memorandum" setting forth the salient features of the preliminary County land use plan was provided to each person in attendance at the meetings. This briefing memorandum provided background information on the process of preparing the land use element of the Waukesha County development plan, described the jurisdictional areas to be included in the plan, described the substantive content of the preliminary land use plan, and set forth the steps to be followed in completing the plan. An opportunity was offered to each local unit of government in the County to comment on the preliminary County land use plan and suggest changes in it. Issues of primary concern raised at the seven intergovernmental meetings held to consider the plan related to the definition of prime agricultural lands and how such lands were delineated on the plan, how town-adopted land use plans were to be incorporated into the County land use plan, and how residential land uses were to be accommodated in the undeveloped rural portions of the County, particularly at what densities and how those densities would be determined. A summary of the questions raised and comments made at the seven intergovernmental meetings is provided in Appendix D.

In the four-month period from mid-November 1995 to mid-March 1996, the Commission staff were provided with additional information by local officials concerning potential adjustments to the preliminary County land use plan. In this regard,

43 letters were received from local officials and interested citizens requesting modification of the preliminary plan. Eight citizens visited the Commission offices with questions related to the plan, and an additional 17 citizens telephoned the Commission offices. Twenty additional meetings were held with local officials and interested citizens to explain the preliminary plan and to receive comments concerning desired changes to the plan.

The information received as a result of this extensive series of meetings was helpful in the formulation of a revised County land use plan. Information was provided concerning needed corrections to account for existing land uses not reflected on the preliminary County land use plan map. In addition, new information was provided concerning recent urban development also not reflected on the preliminary plan map. Such information, pertaining to approved preliminary and recorded land subdivision plats and certified survey maps, had a particularly significant impact on the delineation of prime agricultural lands on the land use plan map. Utilizing the information received as a result of the meetings, a revised County land use plan was prepared.

## RECOMMENDED COUNTY LAND USE PLAN

The revised County land use plan, similar to the preliminary plan, was prepared so as to be consistent with Waukesha County Development Plan Advisory Committee-approved County development objectives and to incorporate, to the extent practicable, the provisions of all adopted city, village, and town land use plans. In areas where local land use plan recommendations were found to be inconsistent with the County development objectives, the County land use plan was designed to meet, to the extent practicable, those objectives. In areas where no adopted local land use plan existed, a recommended land use pattern was prepared in accordance with the County development objectives. In areas where conflicts were still found to exist in extraterritorial areas between adopted city or village plans and adopted town plans, meetings were held involving the staff and the communities concerned. For some of these areas, the city or village concerned agreed formally to amend their land use plan to reflect a mutually agreeable solution to conflicts; for other areas, however, the city or village did not amend their land use plan. With respect to any unresolved areas of conflict, the County land use plan was designed to accommodate the city or village extra-territorial plans.

Table 124

**INTERGOVERNMENTAL MEETINGS HELD TO CONSIDER  
THE PRELIMINARY WAUKESHA COUNTY LAND USE PLAN**

Meeting Number	Date (1995)	Location	Communities Invited to Attend	Local Officials Attending	Number of Other Persons Attending
1	November 16	Brookfield Public Library	Cities of Brookfield, Muskego, and New Berlin; Villages of Butler, Elm Grove, Lannon, and Menomonee Falls; Town of Brookfield	Mayors of the Cities of Brookfield and Muskego; President of the Village of Menomonee Falls; four Waukesha County Board Supervisors; one Waukesha County Park and Planning Commissioner; Attorney for the City of Brookfield; and planning/zoning administrators from the Cities of Brookfield, Muskego and New Berlin, the Village of Menomonee Falls, the Town of Brookfield, and Waukesha County.	2
2	November 16	Delafield Town Hall	City of Delafield; Villages of Chenequa, Hartland, Merton, and Nashotah; Towns of Delafield and Merton	Mayor of the City of Delafield; President of the Village of Hartland; Chairman of the Town of Delafield; one Town of Delafield Board Supervisor; one Village of Chenequa Board Trustee; one Waukesha County Board Supervisor; Village Administrator of the Village of Hartland; and two planning/zoning administrators from Waukesha County.	8
3	November 17	Summit Town Hall	City of Oconomowoc; Villages of Lac La Belle and Oconomowoc Lake; Towns of Oconomowoc and Summit	Mayor of the City of Oconomowoc; President of the Village of Oconomowoc Lake; Chairmen of the Towns of Oconomowoc and Summit; two City of Oconomowoc Alderpeople; four Town of Summit Board Supervisors; one Waukesha County Board Supervisor; one Waukesha County Park and Planning Commissioner; Attorney for the Village of Oconomowoc Lake and the Town of Summit; Superintendent of the Oconomowoc Area Schools; and one planning/zoning administrator from Waukesha County.	6
4	November 21	Regional Planning Commission Offices	City of Waukesha; Village of Pewaukee; Towns of Pewaukee and Waukesha	Chairmen of the Towns of Pewaukee and Waukesha; one Waukesha County Board Supervisor; Attorney for the Town of Pewaukee; and planning/zoning administrators from the City of Waukesha, the Towns of Pewaukee and Waukesha, and Waukesha County.	2
5	December 7	Ottawa Town Hall	Villages of Dousman and Eagle; Towns of Eagle and Ottawa	Chairman of the Town of Ottawa; two Town of Eagle Board Supervisors; two Town of Ottawa Board Supervisors; Clerks of the Village of Dousman and the Town of Ottawa; one Town of Eagle Plan Commissioner; one Town of Ottawa Plan Commissioner; Attorney for the Town of Eagle; and planning/zoning administrators from the Town of Eagle and Ottawa (one person), and Waukesha County.	11
6	December 12	Mukwonago Village Hall	Villages of Big Bend, Mukwonago, North Prairie, and Wales; Towns of Genesee, Mukwonago, and Vernon	Chairpersons of the Towns of Genesee, Mukwonago, and Vernon; one Town of Genesee Board Supervisor; two Town of Mukwonago Board Supervisors; two Town of Vernon Board Supervisors; one Waukesha County Board Supervisor; Clerk of the Town of Mukwonago; three Town of Mukwonago Plan Commissioners; one Village of Mukwonago Plan Commissioner; Attorney for the Towns of Genesee, Mukwonago, and Vernon; and two planning/zoning administrators from Waukesha County.	13
7	December 14	Lisbon Town Hall	Village of Sussex; Town of Lisbon	President of the Village of Sussex; Chairman of the Town of Lisbon; three Town of Lisbon Board Supervisors; two Village of Sussex Board Trustees; two Waukesha County Board Supervisors; one Village of Sussex Plan Commissioner; two Town of Lisbon Plan Commissioners; Attorney for the Village of Sussex; and planning/zoning administrators from the Town of Lisbon and Waukesha County.	13

Source: SEWRPC.

The resulting recommended County land use plan is described in this section of the chapter. The plan is described in terms of buildout conditions and, as such, the planned land use, population, household, and employment levels presented reflect conditions which may be expected upon full development of the County as reflected in the various land uses identified under the plan. There are two significant

differences between the recommended County land use plan and the preliminary County land use plan: 1) the recommended plan identifies significantly less prime agricultural land than did the preliminary plan and 2) the recommended plan identifies a new land use category, "other open lands to be preserved," not initially identified in the preliminary plan.



The preliminary County land use plan identified about 52 square miles of land within the County as prime agricultural land. Such lands were envisioned to be preserved in agricultural use through the implementation, among other means, of exclusive agricultural zoning. The recommended County land use plan identifies only about 17 square miles of land within the county as prime agricultural land. This reduction in prime agricultural land was due to: 1) reapplication of the criterion which specifies that the farm unit must be located within a contiguous block of similar farmland at least five square miles in size and 2) modification of the criterion which specifies that 50 percent or more of the farm unit must be covered by soils meeting U. S. Soil Conservation Service (now U. S. Natural Resource Conservation Service) criteria for National prime farmland or farmland of Statewide importance.

On the basis of the comments made at the intergovernmental meetings held to review the preliminary County land use plan and the information provided in subsequent letters and meetings held with landowners and local officials, it was determined that large areas of land had been committed to new urban residential development in a diffused manner within areas identified as prime agricultural land under the preliminary County land use plan. This commitment to urban sprawl, as evidenced by approved preliminary and recorded subdivision plats and certified survey maps, served to fragment many of the five-square-mile block areas of prime agricultural lands identified on the preliminary plan and, accordingly, resulted in significantly less prime agricultural land being reflected under the recommended County land use plan.

In addition, at the series of intergovernmental meetings held to review the preliminary plan, local public officials, farmers, and landowners questioned the continued validity of including soils of Statewide importance, or Class III soils, in the determination of prime agricultural lands under the County land use plan, noting that such soils were only marginally suitable for crop production. It was indicated that, although inclusion of Class III soils as a criterion for identification of prime agricultural lands may have been appropriate when a majority of farms in Waukesha County were dairy operations, such inclusion was no longer valid. Dairy operations, it was noted, can be viable even though a relatively large portion of the farm unit may be covered by Class III soils, because such soils are

suitable for grazing, production of animal feed crops, and the use of cover crops related to dairy operations. Increased specialization of farm operations and the loss of smaller "family" farms and dairy operations in Waukesha County has raised questions concerning the continued validity of using the presence of Class III soils as a criterion for identification of prime agricultural land. It was further noted that Class III soils in Waukesha County, being sandy and erodible, or droughty, have a relatively low water-holding capacity, rendering them unsuitable for the production of cash grain crops like corn and soybeans. It was therefore suggested that soils meeting U. S. Soil Conservation Service standards for farmland of Statewide importance, or Class III soils, no longer be used as a criterion for the identification of prime agricultural lands in Waukesha County.

Following Waukesha County Development Plan Advisory Committee consideration of this issue, the Committee agreed to modify the prime agricultural land standard to eliminate farmlands of Statewide importance, or Class III soils, as a criterion to be used in the identification of such lands. Under the revised standard, then, prime agricultural lands are herein defined as farmlands meeting the following criteria: 1) the farm unit must be at least 35 acres in size, 2) at least 50 percent of that farm unit must be covered by soils meeting U. S. Soil Conservation Service criteria for National prime farmland, and 3) the farm unit must be located in a contiguous block of similar farmland of at least five square miles in size.

Upon reapplication of the aforementioned Committee-approved prime agricultural land identification criteria, about 17 square miles of such lands remained in the County under the recommended County land use plan

Owing to the reapplication of the criteria relating to the delineation of prime agricultural land, large areas of land formerly classified as prime agricultural land were thus reclassified as rural-density residential and other agricultural land or as other open lands to be preserved in the design of the recommended County land use plan. Compared to the preliminary plan, the recommended plan can therefore accommodate more rural-density residential development. Not all lands suitable for agricultural use, however, are suitable for rural residential use, even at relatively low gross densities of one housing unit per five acres of land. It was thus determined to include another land use

category in the recommended County land use plan, namely "other open lands to be preserved." This category includes open lands in rural areas typically located adjacent to, but outside of, the identified primary and secondary environmental corridors and isolated natural resource areas, consisting of lands within the 100-year recurrence interval floodplain; open lands within existing County or State park and open space sites; and lands covered by soils having a high water table, by poorly drained soils, or by organic soils, which are unsuitable for urban development of any kind.

Because of the relatively large range of lot sizes which could be accommodated within the suburban-density residential land use plan category of 1.5 to 4.9 acres per dwelling unit, the suburban-density residential category was divided into two separate density categories under the recommended County land use plan: 1.5 to 2.9 acres per dwelling unit and 3.0 to 4.9 acres per dwelling unit. This division of the suburban-density residential category enabled a more precise estimate of the household and population levels which can be accommodated under the recommended plan within the broader suburban-density residential category.

Following the intergovernmental meetings held to consider the preliminary County land use plan and taking into consideration subsequent correspondence concerning the preliminary plan, as well as comments made at numerous additional meetings held with local public officials, farmers, landowners, and interested citizens during review of the preliminary plan, a total of 542 site-specific changes were requested to be made to the preliminary County land use plan.

Of the 542 requested changes, 490, or about 91 percent, were determined, on the basis of new information submitted by the petitioners for changes, to be consistent with the Waukesha County Development Plan Advisory Committee-approved objectives, principles, and standards governing the preparation of the plan. Those 490 requested changes were thus incorporated into the recommended County land use plan. An additional 50 of the requested changes, or about 9 percent, all requested by town units of government, were suggested modifications to planned land use within extraterritorial planning areas of adjacent cities or villages. Twenty-three, or about 46 percent of the aforementioned 50 requested changes, were incorporated directly into the recommended County land use plan with concurrence of the adjacent cities or villages concerned;

27, or about 54 percent, were left as initially set forth under the preliminary plan, consistent with the plans of the adjacent incorporated communities and consistent with State statutes specifying that planned land uses identified by cities and villages in their extraterritorial planning areas "control" under the County land use plan. Only two requested changes, or less than one percent of the total 542 changes requested, remained unresolved.

One of those unresolved changes, requested by the Town of Lisbon, sought to designate all of the remaining undeveloped land within the Town for low-density residential use under the recommended County land use plan. The other unresolved change, requested by the Town of Merton, sought to designate certain undeveloped lands in the southeastern portion of the Town for low-density residential use under the recommended County land use plan. As shown later in this chapter, accommodation of these requested changes would, under buildout conditions of the plan, result in an overall gross residential density exceeding one dwelling unit per five acres of land in the areas concerned. This density would be inconsistent with the Committee-approved objectives, principles, and standards governing the preparation of the County land use plan and, therefore, such requested changes could not be accommodated in the recommended County land use plan.

#### Planned Land Use

The pattern of land use envisioned under the recommended County land use plan is shown graphically on Map 87. Tabular and graphic summaries of land use envisioned under the plan are presented in Table 125 and Figure 100. A description of the various urban and nonurban land uses in the County, as envisioned under the plan, follows.

Urban Land Uses: The recommended County land use plan envisions a substantial increase in urban land use within the County. Urban land uses, consisting of lands devoted to residential; commercial; industrial; governmental and institutional; recreational; and transportation, communication, and utility uses, encompassed about 148 square miles and comprised about 26 percent of the total area of the County in 1990.<sup>10</sup> Under the plan, the area

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<sup>10</sup>As was previously mentioned in Footnote 8 above, throughout this chapter land use quantities indicating the land area devoted to a given land use include the area of associated street rights-of-way.

Table 125

## PROPOSED LAND USE UNDER THE RECOMMENDED LAND USE PLAN FOR WAUKESHA COUNTY

Land Use Category <sup>a</sup>	1990			Buildout Conditions <sup>b</sup>			Planned Change: 1990 to Buildout	
	Square Miles	Percent of Urban or Nonurban Subtotal	Percent of Total	Square Miles	Percent of Urban or Nonurban Subtotal	Percent of Total	Square Miles	Percent
<b>Urban</b>								
Residential								
High Density <sup>c</sup>	3.1	2.1	0.5	4.5	1.8	0.8	1.4	45.2
Medium Density <sup>d</sup>	23.2	15.7	4.0	51.0	20.0	8.8	27.8	119.8
Low Density <sup>e</sup>	69.3	46.8	11.9	97.3	38.3	16.8	28.0	40.4
Suburban Density I <sup>f</sup>	3.8	2.6	0.7	11.3	4.4	1.9	7.5	197.4
Suburban Density II <sup>f</sup>	8.1	5.5	1.4	21.4	8.4	3.7	13.3	164.2
Residential Subtotal	107.5	72.7	18.5	185.5	72.9	32.0	78.0	72.6
Commercial	7.7	5.2	1.3	14.2	5.6	2.4	6.5	84.4
Industrial	6.8	4.6	1.2	19.4	7.6	3.3	12.6	185.3
Governmental and Institutional	7.4	5.0	1.3	10.6	4.2	1.8	3.2	43.2
Recreational	10.1	6.8	1.7	15.8	6.2	2.7	5.7	56.4
Transportation, Communication, and Utilities <sup>g</sup>	8.5	5.7	1.5	8.9	3.5	1.6	0.4	4.7
Urban Subtotal	148.0	100.0	25.5	254.4	100.0	43.8	106.4	71.9
<b>Nonurban</b>								
Environmentally Sensitive Areas <sup>h</sup>								
Primary Environmental Corridor	144.9	33.5	24.9	148.4	45.5	25.6	3.5	2.4
Secondary Environmental Corridor	12.0	2.8	2.1	11.1	3.4	1.9	-0.9	-7.7
Isolated Natural Resource Areas	13.1	3.0	2.3	12.3	3.8	2.1	-0.8	-5.9
Subtotal Environmentally Sensitive Areas	170.0	39.3	29.3	171.8	52.7	29.6	1.8	1.1
Other Open Lands to be Preserved <sup>i</sup>	--	--	--	10.8	3.3	1.9	10.8	--
Prime Agricultural	64.6	14.9	11.1	16.9	5.2	2.9	-47.7	-73.8
Rural-density Residential and Other Agricultural Lands	191.5	44.3	33.0	114.9	35.2	19.8	-76.6	-40.0
Extractive	5.5	1.3	0.9	10.7	3.3	1.8	5.2	94.5
Landfill	1.0	0.2	0.2	1.1	0.3	0.2	0.1	10.0
Nonurban Subtotal	432.6	100.0	74.5	326.2	100.0	56.2	-106.4	-24.6
Total Waukesha County	580.6	--	100.0	580.6	--	100.0	0.0	0.0

<sup>a</sup>Street and parking areas are included in the associated land use categories.

<sup>b</sup>Assumes full development of the urban areas envisioned under the recommended County land use plan, as shown on Map 87.

<sup>c</sup>High-density: Less than 6,000 square feet of lot area per dwelling unit.

<sup>d</sup>Medium-density: 6,000 to 19,999 square feet of lot area per dwelling unit.

<sup>e</sup>Low-density: 20,000 square feet to 1.4 acres of lot area per dwelling unit.

<sup>f</sup>Suburban I-density: 1.5 to 2.9 acres of lot area per dwelling unit;  
Suburban II-density: 3.0 to 4.9 acres of lot area per dwelling unit.

<sup>g</sup>Includes freeways, railroad rights-of-way, airports, and utility facilities.

<sup>h</sup>Includes associated surface water areas.

<sup>i</sup>Not identified nor applicable for 1990.

Source: SEWRPC.

devoted to urban uses would increase by about 106 square miles, or about 72 percent, to about 254 square miles under buildout conditions. Under buildout conditions, then, urban land uses would account for about 44 percent of the total area of the County.

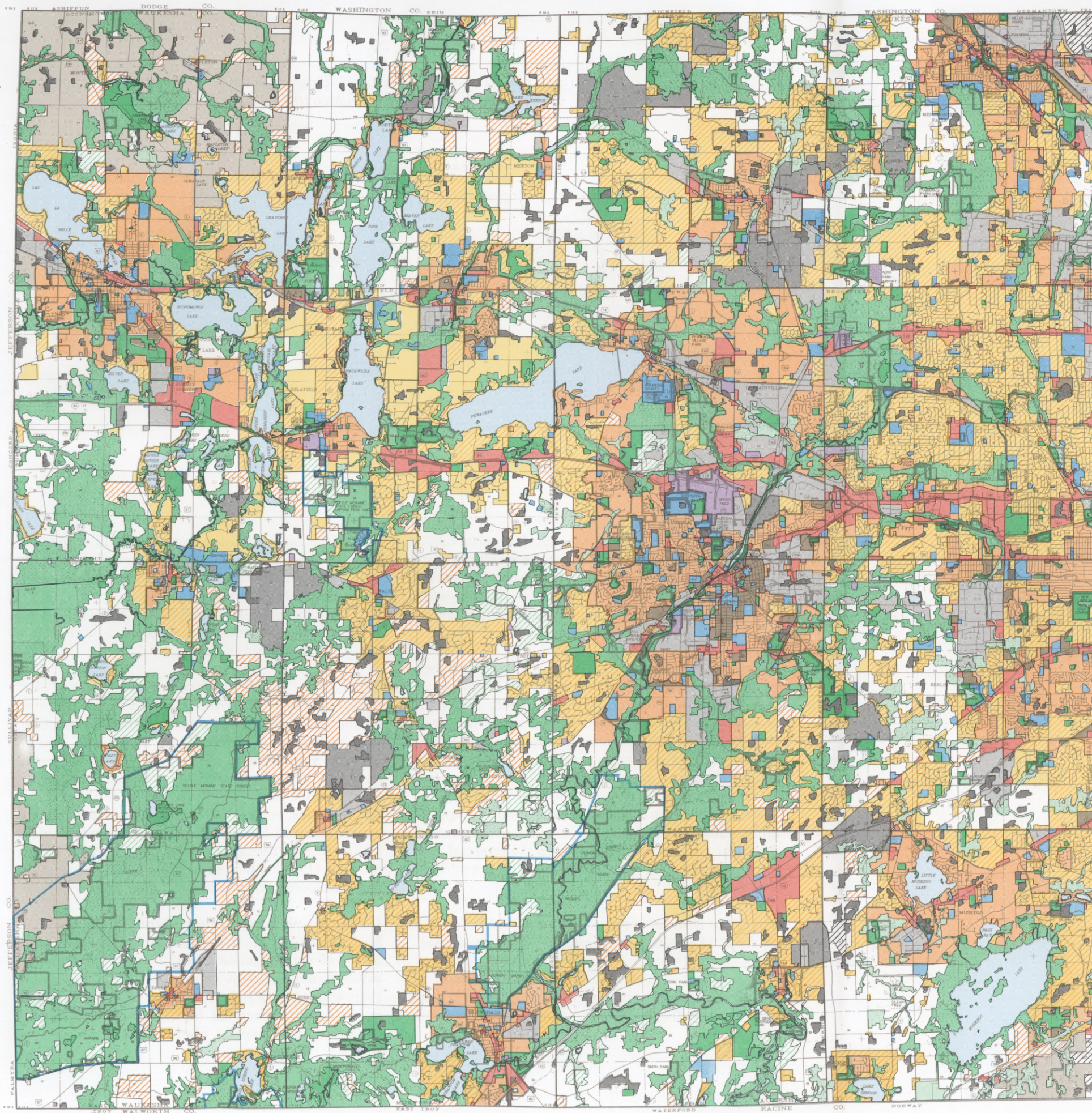
**Residential Land:** Under the recommended County land use plan, urban residential land use would increase by 78 square miles, or about 73 percent, from about 108 square miles in 1990 to about 186

square miles under buildout conditions. Under the plan, the proportion of the County devoted to urban residential use would increase from 19 percent to 32 percent.

Of the total planned increase in urban residential land, about 62 percent would occur at low density, with 20,000 square feet to 1.4 acres of lot area per dwelling unit, or at suburban density, with 1.5 to 4.9 acres of lot area per dwelling unit. About 36 percent of the additional urban residential



RECOMMENDED LAND USE PLAN FOR WAUKESHA COUNTY



LEGEND

GENERALIZED PLANNED LAND USE CATEGORY

- HIGH DENSITY RESIDENTIAL (LESS THAN 6,000 SQUARE FEET OF LOT AREA PER DWELLING UNIT)
- MEDIUM DENSITY RESIDENTIAL (6,000-19,999 SQUARE FEET OF LOT AREA PER DWELLING UNIT)
- LOW DENSITY RESIDENTIAL (20,000 SQUARE FEET TO 1.4 ACRES OF LOT AREA PER DWELLING UNIT)
- SUBURBAN I DENSITY RESIDENTIAL (1.5 TO 2.9 ACRES OF LOT AREA PER DWELLING UNIT)
- SUBURBAN II DENSITY RESIDENTIAL (3.0 TO 4.9 ACRES OF LOT AREA PER DWELLING UNIT)
- RURAL DENSITY RESIDENTIAL AND OTHER AGRICULTURAL LANDS
- COMMERCIAL
- INDUSTRIAL
- GOVERNMENTAL AND INSTITUTIONAL
- RECREATIONAL
- TRANSPORTATION, COMMUNICATION, AND UTILITIES

- EXTRACTIVE
- LANDFILL
- PRIMARY ENVIRONMENTAL CORRIDOR
- SECONDARY ENVIRONMENTAL CORRIDOR
- ISOLATED NATURAL RESOURCE AREA
- OTHER OPEN LANDS TO BE PRESERVED
- PRIME AGRICULTURAL
- SURFACE WATER
- ADOPTED WISCONSIN DEPARTMENT OF NATURAL RESOURCES PROJECT BOUNDARY

*Note: This map is amended annually. Contact the Waukesha County Parks and Land Use Department for the current map.*

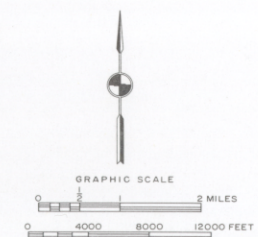
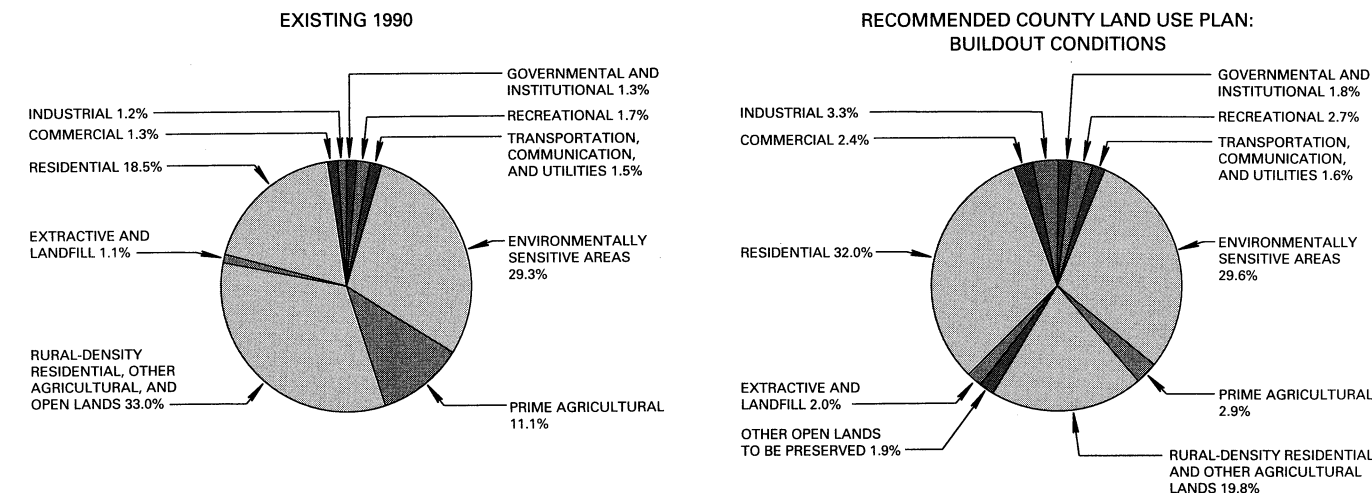




Figure 100

**LAND USE IN WAUKESHA COUNTY: EXISTING 1990  
AND RECOMMENDED COUNTY LAND USE PLAN**



Source: SEWRPC.

land would occur at medium density, with 6,000 to 19,999 square feet of lot area per dwelling unit. The remaining 2 percent of the additional urban residential land would occur at high density, with less than 6,000 square feet of lot area per dwelling unit.

**Commercial and Industrial Land:** The recommended County land use plan also envisions a substantial increase in economic activity areas, as represented by the commercial and industrial uses on Map 87. Under the plan, commercial land use, which includes areas proposed to be utilized for retail, office, and service activities, would increase by about six square miles, or about 84 percent, from about eight square miles in 1990 to about 14 square miles under buildout conditions. The proportion of the total County area devoted to commercial use would accordingly increase from 1.3 percent to 2.4 percent.

Under the plan, industrial land use would increase by about 12 square miles, or about 185 percent, from about seven square miles in 1990 to about 19 square miles under buildout conditions. The proportion of the total County area devoted to industrial use would accordingly increase from 1.2 percent to 3.3 percent.

The large increase in commercial and industrial land in the County envisioned under the recommended plan may be expected to be accompanied by substantial increases in related employment. Employment levels envisioned under recommended plan buildout conditions are presented later in this section of the chapter.

**Other Urban Land:** Increases in other urban land uses, including governmental and institutional; recreational; and transportation, communication, and utility lands, envisioned under the recommended County land use plan are also indicated in Table 125. Under the plan, governmental and institutional lands would increase by about three square miles, or about 43 percent, from about seven square miles in 1990 to about 10 square miles under buildout conditions, most of the increase being associated with planned additional public elementary and secondary schools.

Under the plan, recreational lands would increase by about six square miles, or about 56 percent, from about 10 square miles in 1990 to about 16 square miles under buildout conditions. The increase in recreational land reflects new or expanded County parks as recommended in the Waukesha County park and open space plan, as well as new or

expanded neighborhood and community parks and private outdoor recreational sites shown on local land use plans.<sup>11</sup> The "recreational" designation on the County land use plan for lands which are currently in agricultural or open uses indicates that a need for a County or local public park has been determined to exist at the location of the lands so designated, and that such lands are deemed suitable and should be duly considered for public acquisition and development for outdoor recreation or open space use. Such acquisition by Waukesha County or the local unit of government concerned would normally be the result of negotiations between "a willing buyer and a willing seller," that is, between the government agency involved and the property owner, to arrive at a mutually acceptable price for the sale of such land. If a sale agreement between the parties concerned cannot be reached within a reasonable amount of time and it is determined that the lands concerned will not be purchased by a governmental agency for public recreational or open space use, the developable portions of the subject lands should be made available for private development, consistent with planned adjacent land uses and with the development objectives, principles, and standards of the County development plan.

Under the plan, the transportation, communication, and utility land use category, which includes free-way and railway rights-of-way, airports, and utility facilities, would increase by less than one square mile, or by about 5 percent, from about eight square miles in 1990 to about nine square miles under buildout conditions. The increase in transportation, communication, and utility lands envisioned under the plan includes, among others, lands needed for new or expanded sewage treatment plants, as proposed in the regional water quality management plan, and lands needed for the expansion of Waukesha County-Crites Field and Capitol Airport, as proposed in the regional airport system plan. It should be noted that, for purposes of the plan, the area within the rights-of-way of standard arterial, collector, and land access streets has been included in the associated adjacent land use categories.

It should also be noted that the recommended County land use plan does not envision accommodating any new urban land uses which would be

inconsistent with Federal Aviation Administration (FAA) guidelines concerning runway-protection zones, noise abatement, and building heights. For example, vacant lands lying northeast of the intersection of Pewaukee Road (CTH J) and Bluemound Road (CTH JJ) in the Town of Pewaukee, near Waukesha County-Crites Field, have been designated for commercial use under the recommended County land use plan. This designation is consistent with the FAA guidelines, but development of this area for commercial use should also carefully consider the topographical limitations of the site, traffic concerns, and the impacts on adjacent existing residential land uses. In this regard, extensive retail commercial uses may be inappropriate on the site concerned because of the relatively high traffic volumes which would be generated on CTH J and CTH JJ under buildout conditions of the plan. In addition, the topographic characteristics of the site, as well as the adjacent residential uses, could pose physical site limitations for retail use and impose undesirable impacts on adjacent residential uses. A more appropriate alternative for commercial development could be a low-density "campus-like" setting such as an office park, which could be aesthetically enhanced by the topographic characteristics of the site, be sensitive to the adjacent residential uses, and pose fewer traffic problems.

**Nonurban Land Uses:** Under recommended County land use plan buildout conditions, nonurban land uses, consisting of environmentally sensitive lands, other open lands to be preserved, prime agricultural lands, rural-density residential and other agricultural lands, and extractive and landfill sites, would comprise about 326 square miles, or about 56 percent of the total area of the County. Owing to the substantial amount of urban development envisioned under the plan, the area dedicated to non-urban land uses would decrease by about 106 square miles, or about 25 percent, from about 432 square miles in 1990 to about 326 square miles under buildout conditions.

**Environmentally Sensitive Lands:** The most important remaining elements of the natural resource base are concentrated within areas identified on the recommended County land use plan map as primary environmental corridors, secondary environmental corridors, and isolated natural resource areas. The environmental corridor concept and the pattern of existing environmental corridors and isolated natural resource areas in the County is described in Chapter III of this report.

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<sup>11</sup>As has been mentioned earlier, plan recommendations pertaining to County park and open space sites are set forth in detail in Chapter XIII of this report.

Primary environmental corridors are linear areas in the landscape that contain concentrations of high-value elements of the natural resource base, including almost all of the best remaining floodlands, woodlands, wetlands, and wildlife habitat areas. By definition, these corridors are at least 400 acres in area, two miles long, and 200 feet in width. The plan proposes the preservation of all remaining primary environmental corridors in essentially natural, open uses. Under the plan, development within these corridors would be limited to that needed to accommodate required transportation and utility facilities, compatible outdoor recreation facilities, and, on a limited basis, carefully sited rural-density residential use. The plan further envisions that certain adjacent floodlands within planned sewer service areas that are currently in agricultural or other open uses will over time be allowed to revert to a natural condition, becoming part of the environmental corridor network as urbanization of abutting upland areas proceeds.

Under the recommended County land use plan, the primary environmental corridor area in the County would increase by about three square miles, or about 2 percent, from about 145 square miles in 1990 to about 148 square miles under buildout conditions. Under buildout conditions, the primary environmental corridor lands would account for about 26 percent of the total area of the County, as compared to 25 percent in 1990.

Secondary environmental corridors also contain a variety of resource elements, often being remnants of primary corridors that have been partially converted to intensive urban use or agricultural use. By definition, secondary environmental corridors are at least one mile long and 100 acres in area. The County land use plan recommends that secondary environmental corridors be considered for preservation in natural, open uses or incorporated as drainageways or local parks within developing areas. Such areas may, at the discretion of local units of government, also accommodate intensive urban uses. Caution must be exercised when considering development within such areas, however, since Federal, State, or local natural resource protection regulations concerning wetlands, floodlands, shorelands, stormwater management, and erosion control, among others, may effectively preclude development within lowland portions of such corridor areas. Under the recommended County land use plan, the secondary environmental corridor area would decrease by about one square mile, or

about 8 percent, from about 12 square miles in 1990 to about 11 square miles under buildout conditions, largely as a result of commitments to urban use inherent in locally adopted land use plans. Similar to 1990, the secondary environmental corridors would account for about 2 percent of the total area of the County under buildout conditions.

Isolated natural resource areas consist of smaller pockets of wetlands, woodlands, or surface water that are isolated from the primary and secondary environmental corridors. By definition, isolated natural resource areas are at least five acres in size. The County land use plan recommends that these areas be preserved in natural, open uses insofar as is practicable, recognizing that such areas are often well suited for use as public or private parks and open space reservation. Such areas may, at the discretion of local units of government, also accommodate intensive urban uses. Caution must be exercised when considering development within such areas, however, since Federal, State, or local natural resource protection regulations concerning wetlands, floodlands, shorelands, stormwater management, and erosion control, among others, may effectively preclude development within lowland portions of isolated natural resource areas. Under the recommended County land use plan, the isolated natural resource areas would decrease by about one square mile, or about 6 percent, from about 13 square miles in 1990 to about 12 square miles under buildout conditions, also largely as a result of commitments to urban use inherent in locally adopted land use plans. Under buildout conditions, isolated natural resource areas would account for about 2 percent of the total area of the County, which is similar to their 1990 proportion.

As indicated in Chapter III of this report, the preservation of these environmentally sensitive areas, particularly the primary environmental corridors, is essential to the maintenance of the overall quality of the environment. Moreover, because these areas are typically unsuitable for urban development, their preservation in natural, open uses can help to prevent such new developmental problems as failing foundations for pavement and structures, wet basements, excessive clear water infiltration into sanitary sewerage systems, and poor drainage.

*Other Open Lands to Be Preserved:* Other open lands proposed to be preserved under the recommended County land use plan are lands in rural areas, usually adjacent to, but outside, identified primary and secondary environmental corridors

and isolated natural resource areas, including lands within the 100-year recurrence interval floodplain, open lands within existing County or State park and open space sites, and lands covered by soils with a high water table, poorly drained soils, or organic soils. Such lands, which should be considered unsuitable for development of any kind, amount to about 11 square miles, or about 2 percent of the total area of the County under recommended plan buildout conditions.

It should be noted that Map 87 also shows State project boundaries for four major areas: 1) the Kettle Moraine State Forest--Southern Unit, 2) the Kettle Moraine State Forest--Lapham Peak Unit, 3) Lulu Lake State Natural Area, and 4) the Vernon Marsh Wildlife Area. Lands within such project boundaries have been identified by the Wisconsin Department of Natural Resources as an appropriate addition to adjacent State park, wetland, or forest lands and are intended to be acquired by the State for park and open space purposes. The landowners affected should be able to initiate desired action by offering to sell the land concerned to the State for a mutually acceptable price. If the State does not act within a reasonable amount of time, appropriate private development of the developable portion of such lands concerned could proceed, consistent with the County development plan recommendations.

*Prime Agricultural Land:* The recommended County land use plan envisions, to the extent still practicable, the preservation of the best remaining prime agricultural lands in agricultural use. As previously noted, for purposes of the recommended County land use plan, prime agricultural lands have been identified as farmlands meeting the following criteria: 1) the farm unit must be at least 35 acres in size, 2) at least 50 percent of the farm unit must be covered by soils meeting U. S. Soil Conservation Service criteria for National prime farmland, and 3) the farm unit must be located in a contiguous block of similar farmland at least five square miles in size. In formulating these standards, the Waukesha County Development Plan Advisory Committee attempted to balance the need to preserve agricultural resources with the difficulties faced by farmers in maintaining farms within an urbanizing county where there is inexorable pressure to convert farmlands to other uses. The prime agricultural land standards adopted by the Advisory Committee are intended to preserve the largest remaining blocks of land comprising the best remaining farmlands in the County.

As shown on Map 87, prime agricultural lands envisioned under the recommended plan are located primarily in the northwest and southwest areas of the County. Under the plan, these areas would be retained in parcels of at least 35 acres in order to preserve workable farm units and to prevent the intrusion of incompatible urban development. Structures would be limited to those consistent with agricultural use, with residences limited to homes for the farmer, farm laborers, or parents or children of the farmer.

Under the recommended County land use plan, prime agricultural lands in the County would decrease by about 47 square miles, or about 74 percent, from about 64 square miles in 1990 to about 17 square miles under buildout conditions. The anticipated losses in prime agricultural lands would occur as a result of planned additional urban development, primarily around expanding urban service areas, and as a result of the reclassification of prime agricultural lands to rural-density residential and other agricultural lands, or to other open lands to be preserved. Such areas would be reclassified because they no longer meet the criteria for designation as prime agricultural lands, owing to the intrusion of residential development which disrupts the extensive blocks of farmland which once occurred throughout the County. Some prime agricultural lands would also be lost due to the planned expansion of mineral extraction sites.

It should be noted that, in addition to maintaining agricultural resources for the production of food and fiber, the preservation of prime agricultural land serves a number of other important public purposes. The preservation of farmland helps to prevent the development of scattered, incomplete residential neighborhoods which are difficult to provide with basic public facilities and services, and can thus help to control local public expenditures. The preservation of farmland helps to avoid the creation of costly flood damage and flood control problems, and helps to avoid the need to increase arterial highway capacity to meet traffic demand and curb safety and congestion problems. The preservation of farmland, moreover, helps to sustain wildlife in an area, lends form and structure to the urban settlement pattern, and helps to maintain the cultural heritage and beauty of the County.

*Rural-Density Residential and Other Agricultural Land:* Areas shown in white on the recommended County land use plan map consist primarily of farm and related open lands which do not meet the



criteria for classification as prime agricultural lands, but which are nonetheless proposed to be retained in rural land uses. Rural land uses envisioned under the plan for these areas include continuation of existing farming activity; creation of smaller farms, including hobby farms, horse farms, or other specialty farms; and rural-density residential development.

Rural-density residential development is defined for the purpose of the Waukesha County land use plan as residential development at a gross density of no more than one dwelling unit per five acres of land. It is envisioned that agricultural uses would be encouraged to continue in the rural-residential and other agricultural areas delineated on the plan map to the greatest extent possible, and that rural residential development be allowed to occur in those areas only at such time as the agricultural uses are discontinued. The determination of permitted gross residential density in such areas could be calculated on an areawide basis and would include in the calculation rural-density residential and other agricultural lands, primary or secondary environmental corridors and isolated natural resource areas, and other open lands to be preserved, as designated under the recommended plan, and excluding major lakes and major public land holdings.

Rural-density residential development could take the form of large lots for single-family dwelling units, with each lot being five acres or more in area, or could use density transfer, planned unit development, or cluster subdivision design techniques to achieve the recommended overall gross residential density. Dwelling units could be concentrated on carefully located groupings of smaller lots, possibly as small as one-quarter acre in size, on a portion of a site to be developed, while retaining the balance of the site in agricultural or other open uses. The clusters of residential lots should be sited to preserve the rural appearance of the landscape, to facilitate the provision of sewage disposal and water supply, and to avoid the creation of problems such as poor drainage and foundation failures. This development option could include transfer of development rights between parcels of land throughout the community or adjacent to each other, resulting in higher densities of dwelling units at the development site while maintaining large areas of the landscape in open uses. Many options exist with respect to the use and ownership of the preserved open areas of a rural development, as well as for the design of the portion of the site where dwelling

units are to be clustered. These options and the manner in which they are implemented are considered later in this chapter.

The intent of these recommendations is to preserve, to the extent practicable, the rural character and open space environment historically associated with the County; to minimize additional scattered urban development, which tends to destroy rural character; to avoid environmental problems attendant to the widespread use of onsite wells and sewage disposal systems; to minimize development costs by minimizing the lineal miles of land access streets required; to minimize the area covered by impervious surfaces which cause increases in stormwater runoff and creation of drainage and water quality management problems; and at the same time to accommodate, on a limited basis, the likely continued demand for housing in the outlying rural areas of the County.

Under the recommended County land use plan, the rural-density residential and other agricultural land use category would decrease by about 76 square miles, or 40 percent, from about 191 square miles in 1990 to about 115 square miles under buildout conditions. Most of the decrease would occur as a result of the additional urban development envisioned under the plan, as previously described. As shown on Map 87, lands in this category would be widely distributed in the outlying areas of the County.

*Mineral Extraction Lands:* As noted in Chapter III, Waukesha County contains an abundance of non-metallic mineral resources, the mining of which may be necessary to provide the sand, gravel, and dimensional stone needed in support of the continued development of the area. The recommended County land use plan recognizes that while the County contains an abundance of such resources, efforts to extract sand and gravel or dimensional stone are increasingly constrained by the continued urbanization of the County. The plan seeks to preserve and protect lands for mineral extraction purposes before the lands are developed for urban use or effectively precluded from extractive use by further urban development of adjacent areas.

For this aspect of the plan, the Waukesha County Development Plan Advisory Committee sought input from the Aggregate Producers of Waukesha County, an association of mineral extraction operators in the County. Members of that association

provided information regarding the extent of lands now owned or leased for mineral extraction purposes as well as adjacent lands having the potential for mining activity. The areas so identified are shown on the recommended County land use plan (Map 87). In incorporating these areas into the land use plan, adjustments were made as necessary to ensure that the proposed activity would not encroach upon environmental corridors or isolated natural resource areas.

The areas identified for extractive use under the recommended plan encompass about 11 square miles, or about 2 percent of the total area of the County. It should be recognized in this respect that mineral extractive activity is an interim use, and further, that mining activity at any given site usually proceeds in phases, with early phases undergoing restoration while later phases are being mined. Accordingly, the total area of the County being actively mined at any point in time may be expected to be significantly less than 11 square miles.

The plan recognizes that mineral extraction operations can have significant impacts on surrounding areas, particularly in an urbanizing county. The plan recommends that any significant expansion of mineral extraction activity be preceded by an environmental assessment to identify all significant environmental impacts and recommend appropriate mitigative measures. Any mining activity should meet minimum County or local standards for reclamation. Mining refuse should be removed, topsoil replaced, and the site replanted if it is to remain undeveloped. Redevelopment of the site, if appropriate, should be consistent with the County development objectives for the area in question and compatible with existing adjacent land uses. Finally, mining operators should show proof of financial responsibility prior to initiating new mining operations.

It should be noted that the treatment of mineral extraction land uses in the recommended County land use plan, as described above, does not constitute a comprehensive mineral resource conservation plan for the County. Such a plan would involve a determination of the economic viability of the potential universe of nonmetallic mineral deposits throughout the County and would be a major undertaking. Such a study could be undertaken by the County in the future, thereby providing an important additional element of the evolving development plan for Waukesha County.

**Sanitary Landfill:** The recommended County land use plan incorporates the recommendations of the Waukesha County solid waste management plan pertaining to sanitary landfill sites in the County. That plan envisions the continued operation of existing sanitary landfill sites in the Village of Menomonee Falls and City of Muskego and the modest expansion of one of the sites, the Emerald Park landfill site in the City of Muskego. The sanitary landfill sites shown on the County land use plan map together encompass about one square mile, or less than 1 percent of the total area of the County.

**Population, Household, and Employment Levels** Population, household, and employment levels which could be accommodated under the recommended County land use plan are presented for the County as a whole in Table 126, and for nine subareas of the County delineated by the Regional Planning Commission and referred to as planning analysis areas in Tables 127 through 129. As explained in Chapter VIII, planning analysis areas are geographic areas comprised of individual civil divisions or, more commonly, of groups of contiguous civil divisions which share certain common interests and which face certain common development problems and opportunities. The nine planning analysis areas in the County are shown on Map 88.

Under full buildout of the urban residential areas envisioned under the recommended County land use plan, the resident population of the County would increase by about 204,000 persons, or about 67 percent, from about 305,000 persons in 1990 to about 509,000 persons under buildout conditions. The resident population would increase by at least 50 percent in each planning analysis area except in the Brookfield-Elm Grove and New Berlin Areas, which would increase by about 18 percent and 38 percent, respectively. Among the nine planning analysis areas, the largest absolute increase, about 56,000 persons, would occur in the Waukesha-Pewaukee Area. The largest relative increase, about 138 percent, would occur in the Muskego Area.

Under full buildout of the urban residential areas envisioned under the recommended plan, the number of households in the County would increase by about 84,000, or about 80 percent, from about 106,000 households in 1990 to about 190,000 households under buildout conditions. The relative increase in households would exceed the relative increase in the resident population for the County

Table 126

**POPULATION, HOUSEHOLD, AND EMPLOYMENT LEVELS UNDER  
THE RECOMMENDED LAND USE PLAN FOR WAUKESHA COUNTY**

Demographic or Economic Measure	Actual 1990	Recommended County Land Use Plan		
		Buildout Conditions <sup>a</sup>	Change: 1990 to Buildout	
			Number	Percent
Population .....	304,700	508,900	204,200	67.0
Households .....	106,000	190,400	84,400	79.6
Employment .....	172,300	372,000	199,700	115.9

<sup>a</sup>Assumes full development of the urban areas envisioned under the recommended County land use plan, as shown on Map 87.

Source: SEWRPC.

Table 127

**POPULATION LEVELS UNDER THE RECOMMENDED LAND USE  
PLAN FOR WAUKESHA COUNTY BY PLANNING ANALYSIS AREA**

Number on Map 88	Planning Analysis Area	Total Population			
		Actual 1990	Buildout Conditions <sup>a</sup>	Recommended County Land Use Plan	
				Change: 1990 to Buildout	
				Number	Percent
1	Menomonee Falls-Lannon Area .....	29,800	50,000	20,200	67.8
2	Brookfield-Elm Grove Area .....	45,900	54,100	8,200	17.9
3	New Berlin Area .....	33,600	46,300	12,700	37.8
4	Muskego Area .....	16,800	40,000	23,200	138.1
5	Sussex-Lisbon Area .....	13,300	27,100	13,800	103.8
6	Waukesha Lake Country Area .....	50,000	95,600	45,600	91.2
7	Waukesha-Pewaukee Area .....	79,000	135,300	56,300	71.3
8	South-Central Waukesha County Area .....	29,000	49,600	20,600	71.0
9	Dousman-Eagle Area .....	7,300	10,900	3,600	49.3
--	Total Waukesha County	304,700	508,900	204,200	67.0

<sup>a</sup>Assumes full development of the urban areas envisioned under the recommended County land use plan, as shown on Map 87.

Source: SEWRPC.

overall and for each planning analysis area, owing to the anticipated decline in household size. Among the nine planning analysis areas, the largest absolute increase, about 24,000 households, would occur in the Waukesha-Pewaukee Area. The largest relative increase, about 154 percent, would occur in the Muskego Area.

The foregoing planned population and household levels assume buildout conditions of all urban residential lands indicated on the recommended County land use plan map, namely, of all residential development proposed at a density exceeding one

housing unit per five acres. If all the lands on the plan identified for rural-density residential and other agricultural use were converted to residential use at a gross density not to exceed one unit per five acres of open land, an additional 43,100 persons and 14,900 households could be accommodated in the County under buildout conditions. The additional persons and households which could be accommodated on lands identified for rural-density residential and other agricultural use by planning analysis area are set forth in Table 130 and range from zero persons and households in the Brookfield-Elm Grove Area to about 12,880 persons and 4,140

Table 128

**HOUSEHOLD LEVELS UNDER THE RECOMMENDED LAND USE  
PLAN FOR WAUKESHA COUNTY BY PLANNING ANALYSIS AREA**

Number on Map 88	Planning Analysis Area	Total Households			
		Actual 1990	Recommended County Land Use Plan		
			Buildout Conditions <sup>a</sup>	Change: 1990 to Buildout	
				Number	Percent
1	Menomonee Falls-Lannon Area .....	11,100	19,800	8,700	78.4
2	Brookfield-Elm Grove Area .....	15,800	19,700	3,900	24.7
3	New Berlin Area .....	11,700	17,200	5,500	47.0
4	Muskego Area .....	5,600	14,200	8,600	153.6
5	Sussex-Lisbon Area .....	4,400	9,700	5,300	120.5
6	Waukesha Lake Country Area .....	17,500	36,700	19,200	109.7
7	Waukesha-Pewaukee Area .....	28,700	52,800	24,100	84.0
8	South-Central Waukesha County Area .....	8,900	16,500	7,600	85.4
9	Dousman-Eagle Area .....	2,300	3,800	1,500	65.2
--	Total Waukesha County	106,000	190,400	84,400	79.6

<sup>a</sup>Assumes full development of the urban areas envisioned under the recommended County land use plan, as shown on Map 87.

Source: SEWRPC.

Table 129

**EMPLOYMENT LEVELS UNDER THE RECOMMENDED LAND USE  
PLAN FOR WAUKESHA COUNTY BY PLANNING ANALYSIS AREA**

Number on Map 88	Planning Analysis Area	Total Employment			
		Actual 1990	Recommended County Land Use Plan		
			Buildout Conditions <sup>a</sup>	Change: 1990 to Buildout	
				Number	Percent
1	Menomonee Falls-Lannon Area .....	24,700	44,300	19,600	79.4
2	Brookfield-Elm Grove Area .....	45,300	72,800	27,500	60.7
3	New Berlin Area .....	19,400	35,500	16,100	83.0
4	Muskego Area .....	4,200	10,100	5,900	140.5
5	Sussex-Lisbon Area .....	5,300	16,600	11,300	213.2
6	Waukesha Lake Country Area .....	17,100	56,200	39,100	228.7
7	Waukesha-Pewaukee Area .....	49,100	103,300	54,200	110.4
8	South-Central Waukesha County Area .....	5,700	27,700	22,000	386.0
9	Dousman-Eagle Area .....	1,500	5,500	4,000	266.7
--	Total Waukesha County	172,300	372,000	199,700	115.9

<sup>a</sup>Assumes full development of the urban areas envisioned under the recommended County land use plan, as shown on Map 87.

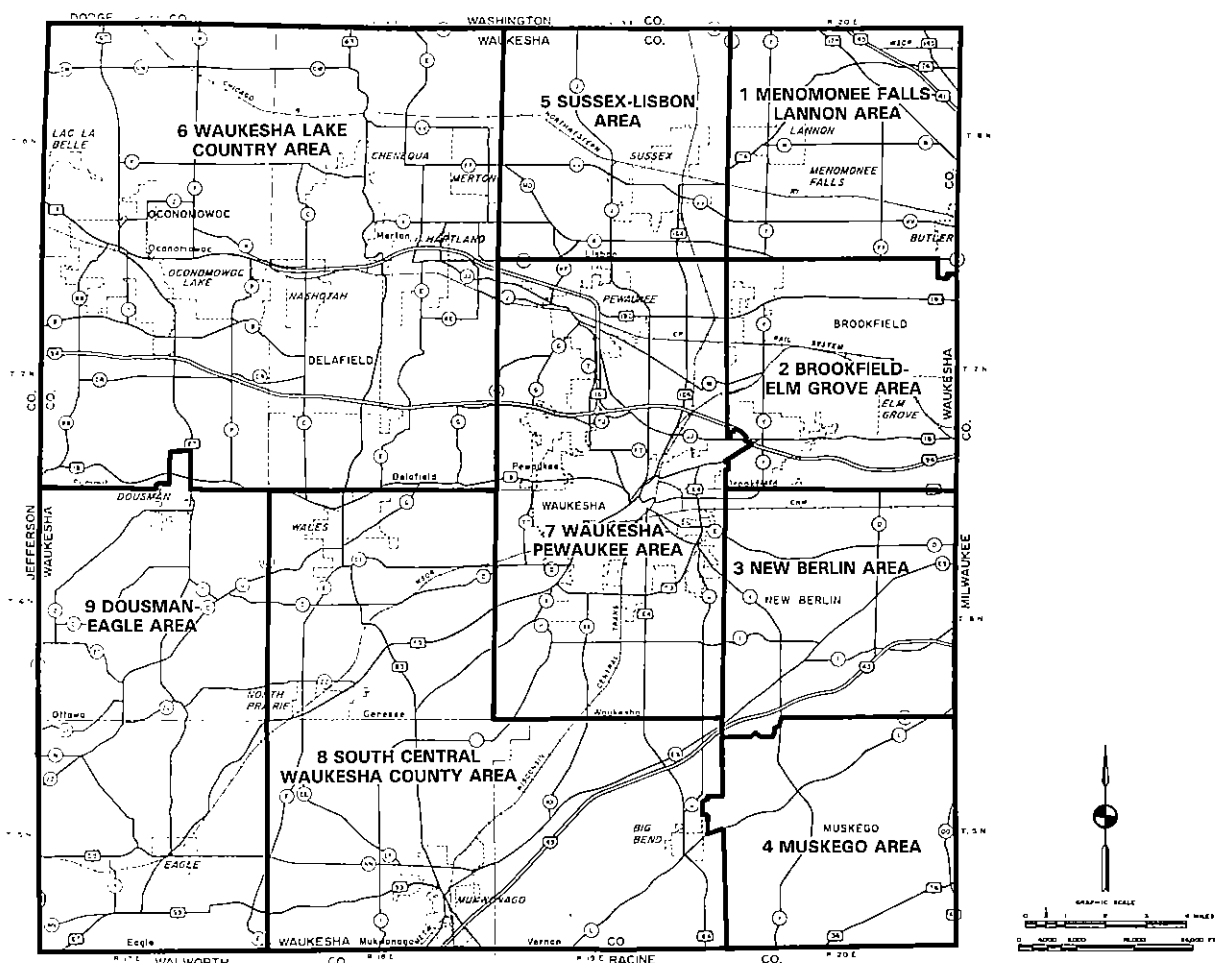
Source: SEWRPC.

households in the South-Central Waukesha County Area. Under buildout conditions of all urban and rural residential areas envisioned under the recommended plan, the County would accommodate a total of about 552,000 persons and about 205,300 households.

Under the recommended County land use plan, the number of employment opportunities, or jobs, in the County would increase by about 200,000, or about 116 percent, from about 172,000 jobs in 1990 to about 372,000 jobs under buildout conditions. Among the nine planning analysis areas, the largest

Map 88

PLANNING ANALYSIS AREAS IN WAUKESHA COUNTY



Source: SEWRPC.

absolute increase, about 54,000 jobs, would occur in the Waukesha-Pewaukee Area. The largest relative increase, about 386 percent, would occur in the South-Central Waukesha County Area.

Of the increase of 200,000 jobs in the County that is envisioned to occur under buildout conditions, about 107,600 jobs, or about 54 percent, are envisioned to occur in the retail, office, and services sectors; while about 86,600 jobs, or about 43 percent, are envisioned to occur in the industrial sector. A modest increase of about 1,300 jobs, or about 1 percent of the total increase, is envisioned to occur in the transportation, communication and utilities sector; an increase of about 4,500 jobs, or about two percent of the total increase, is envisioned to occur in the governmental and institutional sector. The envisioned large increases in relatively low-paying retail and services jobs under the plan may

be expected to increase the demand for low-cost "affordable" housing units within the County.

It is important to note that under the recommended County land use plan, the relative increase of about 116 percent in employment substantially exceeds the relative increase of about 67 percent in the urban residential population and the relative increase of about 80 percent in the number of households. While this reflects, in part, an increase in the labor force participation rate of the resident population, it also suggests an increase in the number of nonresident workers who would commute to places of work in Waukesha County.

Public Sanitary Sewer Service

Under the recommended County land use plan, most of the proposed new urban development within the County would be served with public sanitary

Table 130

ADDITIONAL POPULATION AND HOUSEHOLDS WHICH COULD BE ACCOMMODATED  
ON RURAL-DENSITY RESIDENTIAL AND OTHER AGRICULTURAL LANDS UNDER THE  
RECOMMENDED WAUKESHA COUNTY LAND USE PLAN BY PLANNING ANALYSIS AREA

Number on Map 88	Planning Analysis Area	Additional Population and Households Which Could be Accommodated on Lands Identified for Rural-Density Residential and Other Agricultural Use	
		Households	Population
1	Menomonee Falls-Lannon Area .....	540	1,380
2	Brookfield-Elm Grove Area .....	0	0
3	New Berlin Area .....	680	1,820
4	Muskego Area .....	720	2,010
5	Sussex-Lisbon Area .....	1,520	4,380
6	Waukesha Lake Country Area .....	4,210	11,710
7	Waukesha-Pewaukee Area .....	380	1,090
8	South-Central Waukesha County Area .....	4,140	12,880
9	Dousman-Eagle Area .....	2,720	7,820
--	Total Waukesha County	14,910	43,090

Source: SEWRPC.

sewer facilities. In addition, public sanitary sewer service would be extended to certain urban areas existing in 1990 but lacking such facilities. Areas of the County envisioned to be served with public sanitary sewer facilities under the plan are shown on Map 89. In 1990, about 82 square miles, or about 57 percent of the total developed urban area of the County, and about 218,000 persons, or about 71 percent of the total resident population of the County, were served by public sanitary sewer facilities (see Table 131). Under the plan, about 198 square miles, or about 78 percent of the developed urban area, and about 452,000 persons, or about 82 percent of the total resident population of the County, would be served by public sanitary sewer facilities.

The unsewered urban areas ultimately proposed to be provided with public sanitary sewer service were generally limited to those areas which had been identified for such service in the regional sanitary sewer system plan,<sup>12</sup> in the regional water quality management plan,<sup>13</sup> and in local facility planning programs. Those earlier planning programs identified the long-term need for public sanitary sewer service on the basis of consideration of the density of development, water quality considerations, proximity to existing public sewerage systems, and consideration of the general suitability of the areas for onsite sewage disposal systems. These earlier

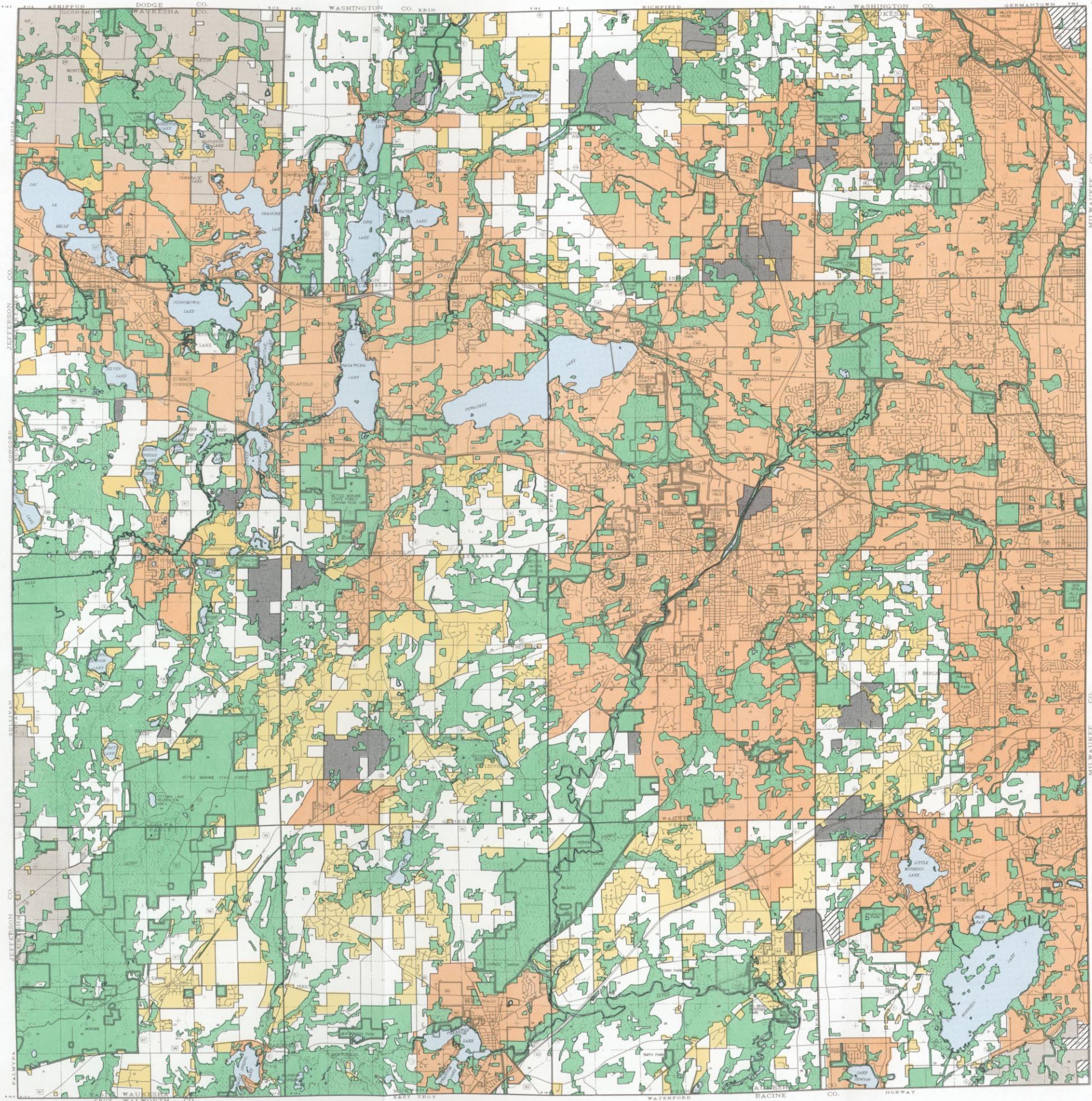
planning programs also provided opportunities for public input on recommendations to include certain areas within the planned future public sewer service area. In some cases, such as the urban development surrounding Beaver and Pine Lakes, lands have been included within the planned sewer service area even though the area has a low-density character where there are presently no known severe problems with onsite systems and it is likely unnecessary to provide for public sewer service in the next 20 years or more. However, these areas lie within or adjacent to a larger area for which public sanitary sewer service will likely be required; thus they are included to allow for proper long-range planning of sewerage components, such as major intercommunity trunk sewers. Other areas, such as the Village of Merton, have been included since they were

<sup>12</sup>SEWRPC Planning Report No. 16, A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin, February 1974.

<sup>13</sup>SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Vol. 1, Inventory Findings, September 1978; Vol. 2, Alternative Plans, February 1979; and Vol. 3, Recommended Plan, June 1979.

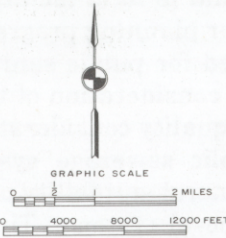


AREA IN WAUKESHA COUNTY ASSUMED TO BE PROVIDED  
WITH CENTRALIZED PUBLIC SANITARY SEWER SERVICE



LEGEND

- URBAN DEVELOPMENT ASSUMED TO BE PROVIDED WITH CENTRAL PUBLIC SANITARY SEWER SERVICE
- OTHER URBAN DEVELOPMENT
- ENVIRONMENTAL CORRIDORS, PARK AND RECREATION AREAS, AND OTHER OPEN SPACES
- RURAL DENSITY RESIDENTIAL AND OTHER AGRICULTURAL LANDS
- PRIME AGRICULTURAL
- EXTRACTIVE
- LANDFILL
- SURFACE WATER



Source: SEWRPC.



Table 131

**EXISTING AND PROPOSED DEVELOPED AREA AND POPULATION SERVED BY PUBLIC SANITARY SEWER SERVICE  
UNDER THE RECOMMENDED WAUKESHA COUNTY LAND USE PLAN BY PLANNING ANALYSIS AREA**

Number on Map 88	Planning Analysis Area (PAA)	Existing 1990					Recommended County Land Use Plan				
		Developed Area <sup>a</sup> (square miles)	Public Sanitary Sewer Service				Developed Area (square miles)	Public Sanitary Sewer Service			
			Developed Area Served		Population Served			Developed Area Served		Population Served	
			Square Miles	Percent of Developed Area of PAA	Number	Percent of Population of PAA		Square Miles	Percent of Developed Area of PAA	Number	Percent of Population of PAA
1	Menomonee Falls-Lannon Area . . .	13.2	9.8	74.2	25,400	85.0	22.2	20.8	93.6	48,600	94.5
2	Brookfield-Elm Grove Area . . . . .	25.0	23.8	95.2	45,800	99.7	29.4	29.4	100.0	54,100	100.0
3	New Berlin Area . . . . .	14.5	10.5	72.4	26,900	80.0	22.0	16.2	73.7	40,400	84.1
4	Muskego Area . . . . .	6.5	5.5	84.6	15,100	89.6	15.3	14.5	94.8	39,100	93.0
5	Sussex-Lisbon Area . . . . .	6.6	1.9	28.8	5,100	38.2	14.8	11.4	76.8	22,200	70.6
6	Waukesha Lake Country Area . . . . .	25.3	10.1	39.9	25,300	50.8	55.1	43.9	79.7	86,600	80.7
7	Waukesha-Pewaukee Area . . . . .	26.4	18.0	68.2	68,200	86.4	49.2	48.7	99.0	134,800	98.9
8	South-Central Waukesha County Area . . . . .	20.4	1.5	7.4	4,700	16.2	35.8	11.2	31.2	21,700	34.8
9	Dousman-Eagle Area . . . . .	6.5	0.5	7.7	1,200	16.8	10.6	1.9	18.5	4,200	22.2
--	Total Waukesha County	144.4	81.6	56.5	217,700	71.4	254.4	198.0	77.9	451,700	81.8

<sup>a</sup>Based on historic urban growth analysis; see Chapter IV of this report.

Source: SEWRPC.

initially identified in the earlier studies as areas which should be provided with public sewer service, but were not included in the planned service area during the 20-year planning period of that plan as a result of public comment and reevaluation. However, given the longer-term framework of the current planning effort, that area is now included within the long-term public sanitary sewer service area. Certain other existing urban areas, such as the Villages of Eagle and Big Bend, have not been included in the areas to be provided public sanitary sewer service, since to date no regional or sub-regional planning programs have established the need and cost-effectiveness for a public sewer system in those areas.

It is envisioned that there will be some revision and refinement of the extent of the planned sewer service areas in the County as a result of sub-regional and local facility sewerage system planning programs. Such planning efforts are needed to evaluate specifically the efficacy of the existing onsite sewerage systems and their cost-effectiveness and the need for public sanitary sewer systems for selected areas. There is currently an ongoing subregional sanitary sewerage system planning program conducted for northwestern Waukesha County<sup>14</sup> which is expected to reevaluate the recommendations contained herein for providing public sanitary sewer systems in selected unsewered urban areas, including several major lake com-

munities and the Villages of Merton and Wales. In addition, that study will consider further the potential need and cost-effectiveness of providing public sanitary sewer service for certain urban areas not currently included within the public sanitary sewer service area, including the urban development surrounding the Genesee Lakes, School Section Lake, Pretty Lake, and Lake Keesus and in the Genesee Depot area. More detailed consideration of other areas, such as the Villages of Big Bend and Eagle, may be conducted in the future.

The developed urban area and population levels in the County which would be served by public sanitary sewer service under the recommended plan are summarized by planning analysis area in Table 131 above. The proportion of developed area served by sanitary sewer service under the plan would range from about 18 percent in the Dousman-Eagle area to 100 percent in the Brookfield-Elm Grove area. The proportion of the total resident population so served would range from a low of 22 percent in the Dousman-Eagle area to 100 percent in the Brookfield-Elm Grove area.

<sup>14</sup>SEWRPC *Prospectus for the Preparation of a Sanitary Sewerage System Plan for the Northwestern Waukesha County Area, September 1993.*



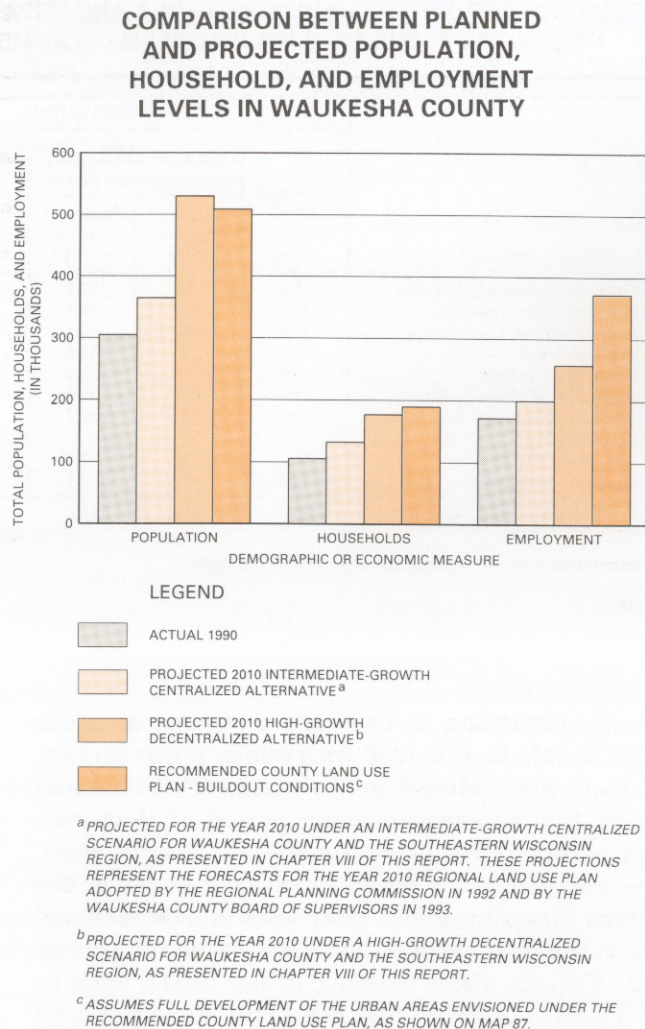
### Comparison between Planned and Projected Population, Household, and Employment Levels

It should be emphasized that the population, household, and employment levels presented herein represent the levels which may be expected to be accommodated under full buildout conditions of the recommended County land use plan. Those levels reflect complete development of the urban land areas identified in under recommended plan and are, for the most part, an outgrowth of the local plans which were incorporated into the County land use plan. Comparison of these planned population, household, and employment levels with projected levels provides a useful perspective on the scale of growth inherent in the recommended County land use plan.

Population, household, and employment projections attendant to four alternative future growth scenarios for Waukesha County and for the seven-county Southeastern Wisconsin Region were presented in Chapter VIII of this report. Two of these scenarios, the "intermediate-growth centralized" scenario and the "high-growth decentralized" scenario, may be considered to be most representative of the range of possible future conditions in the County. The intermediate-growth centralized scenario, it should be noted, provided the basis for the preparation of the design year 2010 regional land use plan. That plan was prepared and adopted by the Regional Planning Commission in 1992 and subsequently adopted by the Waukesha County Board of Supervisors in 1993. As indicated in Chapter VIII, the intermediate-growth centralized scenario envisions moderate increases in population and employment in Southeastern Wisconsin, with urban development concentrated to the extent practicable in and around Kenosha, Milwaukee, and Racine, the largest urban areas of the Region. Compared to the intermediate-growth centralized scenario, the high-growth decentralized scenario envisions considerably greater increases in population and employment in Southeastern Wisconsin and continued or accelerated decentralization of urban development. As a result, population, household, and employment levels for Waukesha County attendant to the high-growth decentralized scenario are substantially higher than those attendant to the intermediate-growth centralized scenario.

The year 2010 population, household, and employment levels projected under the intermediate-growth centralized and high-growth decentralized scenarios are presented in comparison to the build-out population, household, and employment levels

Figure 101



Source: SEWRPC.

possible under the recommended County land use plan in Tables 132 to 135. Related graphic comparisons are presented in Figures 101 to 104. For ease in presentation, the intermediate-growth centralized and high-growth decentralized scenarios will hereinafter be referred to as the "intermediate-growth scenario" and "high-growth scenario," respectively.

As shown in Figure 101, at the County level the population and household levels under recommended plan buildout conditions would approximate the year 2010 levels projected under the high-growth scenario. The population and household levels possible under plan buildout conditions are within 7 percent of the levels projected under a



Table 132

**COMPARISON BETWEEN PLANNED AND PROJECTED POPULATION,  
HOUSEHOLD, AND EMPLOYMENT LEVELS IN WAUKESHA COUNTY**

Demographic or Economic Measure	Actual 1990	Recommended County Land Use Plan: Buildout Conditions <sup>a</sup>	Projected 2010: Intermediate- Growth Scenario <sup>b</sup>	Difference Between 2010 Intermediate-Growth Projection and Plan Buildout Level		Projected 2010: High-Growth Scenario <sup>c</sup>	Difference Between 2010 High-Growth Projection and Plan Buildout Level	
				Number	Percent		Number	Percent
Population .....	304,700	508,900	364,300	144,600	39.7	529,800	-20,900	-3.9
Households .....	108,000	190,400	132,600	57,800	43.6	177,200	13,200	7.4
Employment .....	172,300	372,000	200,100	171,900	85.9	257,500	114,500	44.5

<sup>a</sup>Assumes full development of the urban areas envisioned under the recommended County land use plan, as shown on Map 87.

<sup>b</sup>Projected for the year 2010 under an intermediate-growth centralized scenario for Waukesha County and the Southeastern Wisconsin Region, as presented in Chapter VIII of this report. These projections represent the forecasts for the year 2010 regional land use plan adopted by the Regional Planning Commission in 1992 and by the Waukesha County Board of Supervisors in 1993.

<sup>c</sup>Projected for the year 2010 under a high-growth decentralized scenario for Waukesha County and the Southeastern Wisconsin Region, as presented in Chapter VIII of this report.

Source: SEWRPC.

high-growth scenario, with the population level under plan buildout conditions being slightly lower than the projected population and with the household level under plan buildout conditions being slightly higher than the projected households. As further shown in Figure 101, the population and household levels under plan buildout conditions would substantially exceed, by about 145,000 persons, about 40 percent, and by about 58,000 households, about 43 percent, respectively, the levels projected under the intermediate-growth scenario.

As shown in Figures 102 and 103, there is considerable variation in the relationship between plan buildout and year 2010 projected population and household levels among the nine planning analysis areas in the County. For example, plan buildout population and household levels in the Muskego and Waukesha Lake Country areas would substantially exceed the high-growth projections, while plan buildout population and household levels in the Brookfield-Elm Grove and New Berlin Areas would more closely approximate the intermediate-growth projections.

As shown in Figure 101, total employment in the County under plan buildout conditions would be substantially greater than year 2010 projected levels. The number of jobs in the County under plan buildout conditions would exceed the year 2010

high-growth scenario employment projection by about 115,000 jobs, or about 45 percent, and would exceed the intermediate-growth scenario employment projection by about 172,000 jobs, or about 86 percent. Plan buildout employment would exceed the high-growth scenario employment projections in all nine planning analysis areas by amounts ranging from about 12 percent in the Brookfield-Elm Grove Area to over 200 percent in the South Central Waukesha County Area. Plan buildout employment would exceed the intermediate-growth scenario employment projections by amounts ranging from 27 percent in the Brookfield-Elm Grove Area to over 400 percent in the South Central Waukesha County Area (see Table 135 and Figure 104).

It should be noted that in 1995 the Regional Planning Commission completed new year 2020 projections of population, households, and employment for each county in the Southeastern Wisconsin Region. Such projections are set forth in SEWRPC Technical Report No. 11 (Third Edition), The Population of Southeastern Wisconsin and in SEWRPC Technical Report No. 10 (Third Edition), The Economy of Southeastern Wisconsin. Population, household, and employment levels envisioned for Waukesha County under buildout conditions of the recommended County land use plan would substantially exceed the year 2020 projected population, household, and employment levels set forth



Table 133

**COMPARISON BETWEEN PLANNED AND PROJECTED  
POPULATION LEVELS IN WAUKESHA COUNTY BY PLANNING ANALYSIS AREA**

Number on Map 88	Area Name	Total Population							
		Actual 1990	Recommended County Land Use Plan: Buildout Conditions <sup>a</sup>	Projected 2010: Intermediate- Growth Scenario <sup>b</sup>	Difference Between 2010 Intermediate-Growth Projection and Plan Buildout Level		Projected 2010: High-Growth Scenario <sup>c</sup>	Difference Between 2010 High-Growth Projection and Plan Buildout Level	
					Number	Percent		Number	Percent
1	Menomonee Falls-Lannon Area .....	29,800	50,000	39,000	11,000	28.2	57,100	-7,100	-12.4
2	Brookfield-Elm Grove Area .....	45,900	54,100	49,500	4,600	9.3	57,900	-3,800	-6.6
3	New Berlin Area .....	33,600	46,300	43,000	3,300	7.7	63,400	-17,100	-27.0
4	Muskego Area .....	16,800	40,000	20,000	20,000	100.0	29,500	10,500	35.6
5	Sussex-Lisbon Area .....	13,300	27,100	17,000	10,100	59.4	28,800	-1,700	-5.9
6	Waukesha Lake Country Area .....	50,000	95,600	57,500	38,100	66.3	90,100	5,500	6.1
7	Waukesha-Pewaukee Area .....	78,900	135,300	99,000	36,300	36.7	138,100	-2,800	-2.0
8	South-Central Waukesha County Area ...	29,000	49,600	30,800	18,800	61.0	51,600	-2,000	-3.9
9	Dousman-Eagle Area .....	7,200	10,900	8,500	2,400	28.2	13,300	-2,400	-18.0
--	Total Waukesha County	304,500	508,900	364,300	144,600	39.7	529,800	-20,900	-3.9

<sup>a</sup> Assumes full development of the urban areas envisioned under the recommended County land use plan, as shown on Map 87.

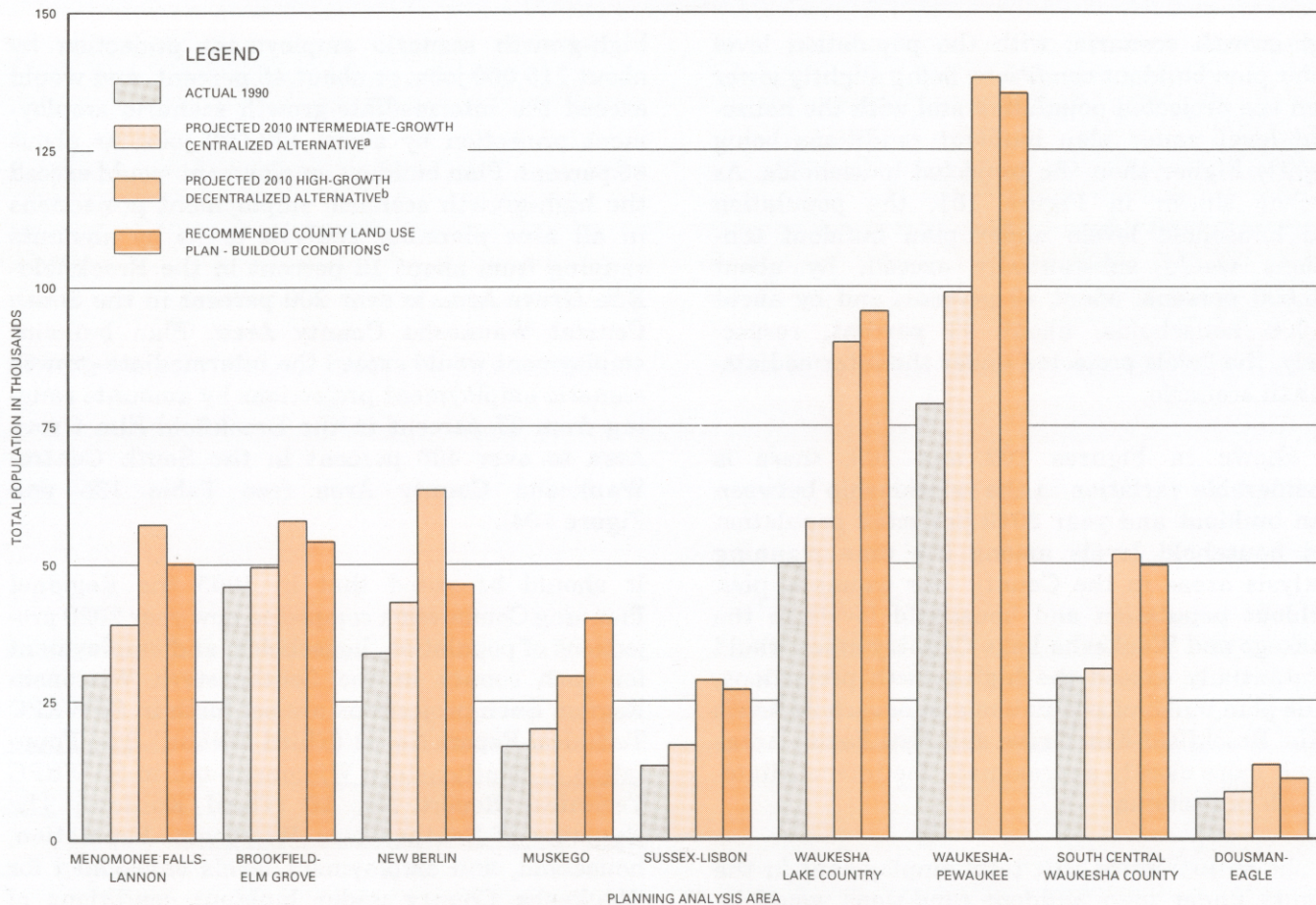
<sup>b</sup> Projected for the year 2010 under an intermediate-growth centralized scenario for Waukesha County and the Southeastern Wisconsin Region, as presented in Chapter VIII of this report. These projections represent the forecasts for the year 2010 regional land use plan adopted by the Regional Planning Commission in 1992 and by the Waukesha County Board of Supervisors in 1993.

<sup>c</sup> Projected for the year 2010 under a high-growth decentralized scenario for Waukesha County and the Southeastern Wisconsin Region, as presented in Chapter VIII of this report.

Source: SEWRPC.

Figure 102

**COMPARISON BETWEEN PLANNED AND PROJECTED  
POPULATION LEVELS IN WAUKESHA COUNTY BY PLANNING ANALYSIS AREA**



<sup>a</sup> PROJECTED FOR THE YEAR 2010 UNDER AN INTERMEDIATE-GROWTH CENTRALIZED SCENARIO FOR WAUKESHA COUNTY AND THE SOUTHEASTERN WISCONSIN REGION, AS PRESENTED IN CHAPTER VIII OF THIS REPORT. THESE PROJECTIONS REPRESENT THE FORECASTS FOR THE YEAR 2010 REGIONAL LAND USE PLAN ADOPTED BY THE REGIONAL PLANNING COMMISSION IN 1992 AND BY THE WAUKESHA COUNTY BOARD OF SUPERVISORS IN 1993.

<sup>b</sup> PROJECTED FOR THE YEAR 2010 UNDER A HIGH-GROWTH DECENTRALIZED SCENARIO FOR WAUKESHA COUNTY AND THE SOUTHEASTERN WISCONSIN REGION, AS PRESENTED IN CHAPTER VIII OF THIS REPORT.

<sup>c</sup> ASSUMES FULL DEVELOPMENT OF THE URBAN AREAS ENVISIONED UNDER THE RECOMMENDED COUNTY LAND USE PLAN, AS SHOWN ON MAP 87.

Source: SEWRPC.



Table 134

**COMPARISON BETWEEN PLANNED AND PROJECTED  
HOUSEHOLD LEVELS IN WAUKESHA COUNTY BY PLANNING ANALYSIS AREA**

Number on Map 88	Area Name	Total Households							
		Actual 1990	Recommended County Land Use Plan: Buildout Conditions <sup>a</sup>	Projected 2010: Intermediate- Growth Scenario <sup>b</sup>	Difference Between 2010 Intermediate-Growth Projection and Plan Buildout Level		Projected 2010: High-Growth Scenario <sup>c</sup>	Difference Between 2010 High-Growth Projection and Plan Buildout Level	
					Number	Percent		Number	Percent
1	Menomonee Falls-Lannon Area .....	11,100	19,800	14,700	5,100	34.7	19,600	200	1.0
2	Brookfield-Elm Grove Area .....	15,800	19,700	17,600	2,100	11.9	18,900	800	4.2
3	New Berlin Area .....	11,700	17,200	15,200	2,000	13.2	20,700	-3,500	-16.9
4	Muskego Area .....	5,600	14,200	6,600	7,600	115.2	8,800	5,400	61.4
5	Sussex-Lisbon Area .....	4,400	9,700	5,900	3,800	64.4	9,300	400	4.3
6	Waukesha Lake Country Area .....	17,500	36,700	21,300	15,400	72.3	30,800	5,900	19.2
7	Waukesha-Pewaukee Area .....	28,700	52,800	38,700	14,100	36.4	49,700	3,100	6.2
8	South-Central Waukesha County Area ...	8,900	16,500	9,900	6,600	66.7	15,400	1,100	7.1
9	Dousman-Eagle Area .....	2,300	3,800	2,700	1,100	40.7	4,000	-200	-5.0
--	Total Waukesha County	106,000	190,400	132,600	57,800	43.6	177,200	13,200	7.4

<sup>a</sup> Assumes full development of the urban areas envisioned under the recommended County land use plan, as shown on Map 87.

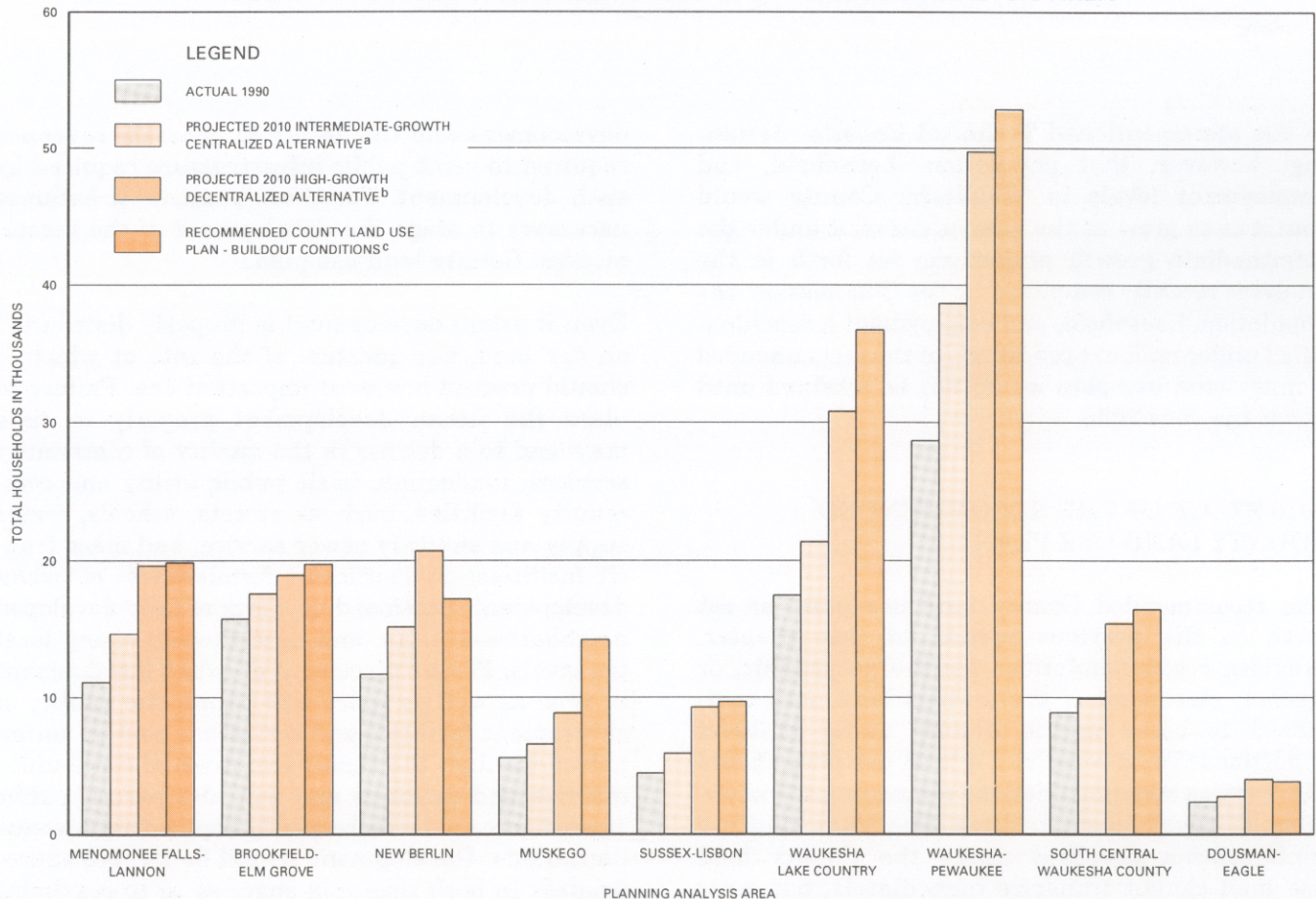
<sup>b</sup> Projected for the year 2010 under an intermediate-growth centralized scenario for Waukesha County and the Southeastern Wisconsin Region, as presented in Chapter VIII of this report. These projections represent the forecasts for the year 2010 regional land use plan adopted by the Regional Planning Commission in 1992 and by the Waukesha County Board of Supervisors in 1993.

<sup>c</sup> Projected for the year 2010 under a high-growth decentralized scenario for Waukesha County and the Southeastern Wisconsin Region, as presented in Chapter VIII of this report.

Source: SEWRPC.

Figure 103

**COMPARISON BETWEEN PLANNED AND PROJECTED  
HOUSEHOLD LEVELS IN WAUKESHA COUNTY BY PLANNING ANALYSIS AREA**



<sup>a</sup> PROJECTED FOR THE YEAR 2010 UNDER AN INTERMEDIATE-GROWTH CENTRALIZED SCENARIO FOR WAUKESHA COUNTY AND THE SOUTHEASTERN WISCONSIN REGION, AS PRESENTED IN CHAPTER VIII OF THIS REPORT. THESE PROJECTIONS REPRESENT THE FORECASTS FOR THE YEAR 2010 REGIONAL LAND USE PLAN ADOPTED BY THE REGIONAL PLANNING COMMISSION IN 1992 AND BY THE WAUKESHA COUNTY BOARD OF SUPERVISORS IN 1993.

<sup>b</sup> PROJECTED FOR THE YEAR 2010 UNDER A HIGH-GROWTH DECENTRALIZED SCENARIO FOR WAUKESHA COUNTY AND THE SOUTHEASTERN WISCONSIN REGION, AS PRESENTED IN CHAPTER VIII OF THIS REPORT.

<sup>c</sup> ASSUMES FULL DEVELOPMENT OF THE URBAN AREAS ENVISIONED UNDER THE RECOMMENDED COUNTY LAND USE PLAN, AS SHOWN ON MAP 87.

Source: SEWRPC.



Table 135

**COMPARISON BETWEEN PLANNED AND PROJECTED  
EMPLOYMENT LEVELS IN WAUKESHA COUNTY BY PLANNING ANALYSIS AREA**

Number on Map 88	Area Name	Total Employment							
		Actual 1990	Recommended County Land Use Plan: Buildout Conditions <sup>a</sup>	Projected 2010: Intermediate- Growth Scenario <sup>b</sup>	Difference Between 2010 Intermediate-Growth Projection and Plan Buildout Level		Projected 2010: High-Growth Scenario <sup>c</sup>	Difference Between 2010 High-Growth Projection and Plan Buildout Level	
					Number	Percent		Number	Percent
1	Menomonee Falls-Lannon Area .....	24,700	44,300	25,500	18,800	73.7	29,200	15,100	51.7
2	Brookfield-Elm Grove Area .....	45,300	72,800	57,100	15,700	27.5	65,100	7,700	11.8
3	New Berlin Area .....	19,400	35,500	20,400	15,100	74.0	28,000	7,500	26.8
4	Muskego Area .....	4,200	10,100	4,900	5,200	106.1	7,100	3,000	42.3
5	Sussex-Lisbon Area .....	5,300	16,600	5,100	11,500	225.5	7,100	9,500	133.8
6	Waukesha Lake Country Area .....	17,100	58,200	18,400	37,800	205.4	32,600	23,600	72.4
7	Waukesha-Pewaukee Area .....	49,100	103,300	61,900	41,400	66.9	77,100	26,200	34.0
8	South-Central Waukesha County Area ....	5,700	27,700	5,500	22,200	403.6	9,200	18,500	201.1
9	Dousman-Eagle Area .....	1,500	5,500	1,300	4,200	323.1	2,100	3,400	161.9
--	Total Waukesha County	172,300	372,000	200,100	171,900	85.9	257,500	114,500	44.5

<sup>a</sup> Assumes full development of the urban areas envisioned under the recommended County land use plan, as shown on Map 87.

<sup>b</sup> Projected for the year 2010 under an intermediate-growth centralized scenario for Waukesha County and the Southeastern Wisconsin Region, as presented in Chapter VIII of this report. These projections represent the forecasts for the year 2010 regional land use plan adopted by the Regional Planning Commission in 1992 and by the Waukesha County Board of Supervisors in 1993.

<sup>c</sup> Projected for the year 2010 under a high-growth decentralized scenario for Waukesha County and the Southeastern Wisconsin Region, as presented in Chapter VIII of this report.

Source: SEWRPC.

in the aforementioned Technical Reports. Assuming, however, that population, household, and employment levels in Waukesha County would continue to grow at the rate envisioned under the intermediate growth projections set forth in the analyses recently completed by the Commission, the population, household, and employment levels identified under buildout conditions of the recommended County land use plan would not be attained until about the year 2050.

## 2010 STAGE OF THE RECOMMENDED COUNTY LAND USE PLAN

The recommended County land use plan, as set forth in the previous section of this chapter, provides recommendations for the geographic, or spatial, placement of the various land uses envisioned to occur in the County under buildout conditions. To be complete, a land use plan should also contain recommendations concerning the placement of development in time. The total land use configuration proposed under the County land use plan cannot transpire immediately, but must emerge gradually over time. Community development entails substantial public expenditures; a balance must be struck between the rate of

development and the ability to generate revenues required to meet public infrastructure required by such development. For these reasons, it becomes necessary to stage the development of the recommended County land use plan.

Even if urban development is properly distributed on the land, the question of the rate at which it should proceed is a most important one. Failure to place the urban development properly in time may lead to a decline in the quality of community services; inadequate basic public utility and community facilities, such as streets, schools, water supply and sanitary sewer service, and mass transit facilities; an inefficient formlessness of urban development occasioned by a lack of fully developed neighborhood units; and continuously rising local tax levels. Proper placement of urban development in time as well as space will permit the quality of government facilities and services to remain unimpaired through the timely extension of community utilities and facilities and will also permit public expenditures to be more nearly kept within revenue limitations. Development should be located appropriately in both time and space so as to maximize the use of existing public facilities and services and to facilitate the efficient and economical extension of such public facilities and services.